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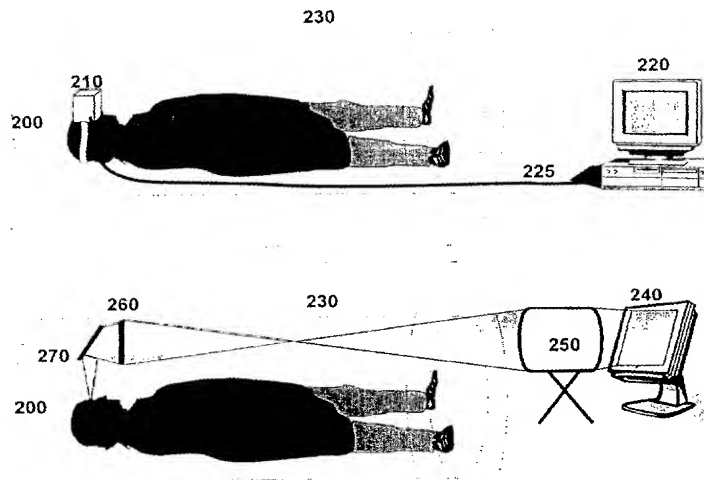
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[Continued on next page]

(54) Title: METHODS FOR PHYSIOLOGICAL MONITORING, TRAINING, EXERCISE AND REGULATION



(57) Abstract: Computer executable software and device for guiding brain activity training comprising: logic which takes data corresponding to activity measurements of one or more internal voxels of a brain and determines one or more members of the group consisting of: a) what next stimulus to communicate to the subject (200), b) what next behavior to instruct the subject to perform; c) when a subject is to be exposed to a next stimulus; d) when the subject is to perform a next behavior; e) one or more activity metrics computed from the measured activity; f) a spatial pattern computed from the measured activity; g) a location of a region of interest computed from the measured activity; h) performance targets that a subject is to achieve computed from the measured activity; i) a performance measure of a subject's success computed from the measured activity; j) a subject's position relative to an activity measurement instrument; and logic for communicating information based on the determinations to the subject in substantially real time relative to when the activity is measured.



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## INTERNATIONAL SEARCH REPORT

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## A. CLASSIFICATION OF SUBJECT MATTER

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US CL :600/410; 128/920

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 600/410, 418, 544, 545; 128/920

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y, E	US 6,356,781 B1 (LEE et al.) 12 March 2002, see col. 4, line 48 - col. 5, line 7.	1-14, 16-26
Y	<sup>245</sup> 6,066,163 A (JOHN) 23 May 2000, see col. 3, lines 19-63 and claims 1 and 10.	1-14 and 16-26
Y	US 5,887,074 A (LAI et al.) 23 March 1999, see col. 2, line 50 - col. 3, line 14.	1-14 and 16-26

☐ Further documents are listed in the continuation of Box C.
 ☐ See patent family annex.

* Special categories of cited documents:		"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A"	document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Z"	document member of the same patent family
"O"	document referring to an oral disclosure, use, exhibition or other means		
"P"	document published prior to the international filing date but later than the priority date claimed		

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